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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Teng-Kuei Lee)
SERIAL NO: 10/684,888) Group Art Unit: 2861
FILED: October 14, 2003) Examiner: Anh T N Vo
TITLE: INK CARTRIDGE FOR AN INK JET PRINTER

AMENDED CLAIMS

1. (currently amended) An ink cartridge for supplying ink to a recording head of an ink jet printer, said ink cartridge comprising:
an ink supplying member which defines a supplying chamber for holding the ink therein, and which includes a supplying port that is in fluid communication with said supplying chamber, and that is adapted for passage of the ink therethrough to be supplied to the recording head of the ink jet printer in response to activation of the recording head, and an inlet port that is disposed upstream of said supplying port, said supplying chamber having an ink-flow inducing zone and an ink-holding zone disposed immediately downstream and upstream of said inlet port and said supplying port, respectively;

an ink absorbent body which is made of such a material as to hold the ink in voids thereof by capillary action in a saturated state, and to discharge the ink so that the ink in said voids in response to the activation of the recording head is partially depleted in said ink absorbent body, thereby placing said ink absorbent body in an unsaturated state, said ink absorbent body being configured to be received in said ink-holding zone such that, in the saturated and unsaturated states, said ink-flow inducing zone is air-tightly cut off from said supplying port by said ink absorbent body, and such that, in the unsaturated state, air in said ink-flow inducing zone takes the place of the depleted ink and refills said voids, thereby creating a reduced pressure in said ink-flow inducing zone;
an ink reservoir which contains ink with a liquid level, and which is disposed upstream of said inlet port; and

a conduit having an intake end dipped in the ink below the liquid level, and an output end which is downstream of said intake end, and which is disposed in fluid

communication with said inlet port such that, when the reduced pressure is created in said ink-flow inducing zone, the ink in said ink reservoir is suctioned through said conduit into said ink-flow inducing zone to replenish voids with ink, thereby placing said ink absorbent body to the saturated state;

wherein said ink reservoir is formed integrally with and is juxtaposed with said ink supplying member.

2. (cancelled)
3. (currently amended) The ink cartridge of Claim [[2]] 1, wherein said ink supplying member has a bottom wall which is formed with a lower hole that serves as said supplying port, and a first top wall which is spaced apart from said bottom wall in an upright direction, which is formed with a first upper hole that serves as said inlet port, and which cooperates with said bottom wall to define said supplying chamber therebetween such that said ink-flow inducing zone and said ink-holding zone are opposite to each other in the upright direction.
4. (original) The ink cartridge of Claim 3, wherein said first top wall has a vent hole which is disposed to communicate said ink-flow inducing zone with the outside, and a cap which is detachably mounted in said vent hole.
5. (original) The ink cartridge of Claim 3, wherein said ink absorbent body is formed from a sponge material which has a plurality of pores to serve as the voids.
6. (original) The ink cartridge of Claim 3, wherein said ink reservoir has a second top wall which is disposed opposite to said first top wall in a transverse direction relative to the upright direction, and which has a second upper hole for passage of said intake end of said conduit into said ink reservoir, said conduit further having a tubular portion which is disposed outwardly of said ink reservoir and said supplying chamber and which has two ends connected to and fluidly communicated with said intake end and said output end, respectively.
7. (original) The ink cartridge of Claim 6, wherein said intake end is lower than said output end, respectively.
8. (original) The ink cartridge of Claim 7, wherein said second top wall further has an ink refilling port for refilling said ink reservoir with ink.
9. (original) The ink cartridge of Claim 1, wherein said ink reservoir is made of transparent material.